

IN THE CLAIMS:

The following claim listing replaces all previous claim listings.

Claim 1. (currently amended) An information distribution system comprising:

a key management server for managing secret keys and public keys corresponding to given attribute values;

a user terminal for accessing said key management server to obtain attribute secret keys generated based on said secret keys, said attribute secret keys corresponding to attributes ~~of~~ identifying said user terminal; and

a provider terminal for generating an encrypted content that can be decrypted by said user terminal having said attribute secret keys corresponding to given attributes by means of said public keys;

wherein said provider terminal distributes said encrypted content and said user terminal decrypts said encrypted content decryptable by means of said attribute secret keys of its own.

Claim 2. (currently amended) The information distribution system according to claim 1, wherein said provider terminal distributes said encrypted content without specifying an address of said user terminal that is to receive said encrypted content.

Claim 3. (original) The information distribution system according to claim 1, wherein said user terminal sends a set of attribute values indicating attributes of its own to said key management server; and

said key management server generates said attribute secret keys unique to said user terminal based on, among said secret keys managed by said key management server, secret keys corresponding to the attribute values sent from said user terminal and sends said attribute secret keys to said user terminal.

Claim 4. (currently amended) A server comprising:

a key storage for storing secret keys and public keys corresponding to predetermined attribute values;

an attribute secret key generator for obtaining a set of given attribute values and generating attribute secret keys corresponding to said set of attribute values based on secret keys corresponding to said attribute values among said secret keys stored in said key storage; and  
a sending/receiving unit for receiving said set of attribute values from a given user terminal and sending said attribute secret keys generated by said attribute secret key generator to said user terminal;  
and  
wherein said attribute values identifying said user terminal.

Claim 5. (currently amended) The server according to claim 4, wherein said attribute secret key generator generates said attribute secret keys by using a protocol implementing oblivious transfer protocol.

Claim 6. (currently amended) An information processing apparatus comprising:  
a criteria key generator for obtaining public keys corresponding to attribute values indicating attributes ~~of~~ identifying a recipient to which a content is to be sent and using said public keys to generate criteria keys that can be decrypted by secret keys corresponding to said public keys;  
an encrypted content generator for encrypting said content based on said criteria keys; and  
a sending unit for sending said encrypted content without specifying any recipient of said content via a network.

Claim 7. (original) The information processing apparatus according to claim 6, wherein said criteria key generator combines, based on predetermined rules, criteria keys corresponding to the individual attribute values encrypted by using public keys corresponding to said individual attribute values to generate a criteria key for restricting recipients of said content.

Claim 8. (original) The information processing apparatus according to claim 6, wherein said criteria key generator generates a session key for encrypting said content and a criteria key for decrypting said session key; and

said encrypted content generator uses said session key to encrypt said content.

Claim 9. (currently amended) An information processing apparatus receiving a content distributed over a network, comprising:

a sending/receiving unit for accessing a key management server managing secret keys and public keys corresponding to given attribute values to receive attribute secret keys corresponding to attributes established for identifying said information processing apparatus, said attribute secret keys being generated based on said secret keys; and

a decryptor for obtaining an encrypted content and decrypting said content based on said attribute secret keys.

Claim 10. (currently amended) The information processing apparatus according to claim 9, wherein said sending/receiving unit sends a set of attribute values established for said information processing apparatus to said key management server and receives said attribute ~~secrete~~ secret keys generated based on said set of attribute values from said key management server.

Claims 11-18 (cancelled)

Claim 19. (currently amended) A key distribution method for controlling a computer to generate and distribute a decryption key for decrypting information encrypted with a given public key, comprising the steps of:

generating n secret keys and n public keys corresponding to said secret keys and storing said secret keys and public keys in a given storage;

obtaining information about k ( $\leq n$ ) secret keys selected at random by

a given client from among said n secret keys stored in said storage;  
reading said k secret keys corresponding to information about the  
obtained secret keys from said storage and using a protocol for  
implementing oblivious transfer protocol to generate decryption keys for  
decrypting information encrypted with said k public keys corresponding to  
the k secret keys; and  
providing said generated decryption keys to said client; and  
wherein n is the number of secret keys and public keys, and k is the  
number of the secret keys selected at random by the given client.

Claim 20. (currently amended) An information distribution system  
comprising:

a service provider managing secret keys and public keys for given  
attribute values; and

a plurality of user terminals for accessing said service provider to  
obtain attribute secret keys corresponding to attributes ~~of their own~~  
identifying the user terminals, said attribute secret keys being generated  
based on said secret keys;

wherein, a given one of said user terminals generates an encrypted  
content and sends said encrypted content to one or more of the other user  
terminals, said encrypted content being decryptable by said one or more of  
the other user terminals having said attribute secret keys corresponding  
to given attributes by means of said public keys; and

said one or more of the other user terminals decrypt said encrypted  
content decryptable by means of said attribute secret keys of their own.

Claim 21. (currently amended) An information distribution system  
comprising:

a key management server for managing secret keys and public keys for  
given attribute values; and

a plurality of user terminals for accessing said key management  
server to obtain attribute secret keys corresponding to attributes ~~of~~  
~~their own~~ identifying the user terminals, said attribute secret keys being  
generated based on said secret keys, wherein a given one of said user

terminals generates a group key and sends said group key to ones of the other user terminals and provides a content, said encrypted group key being decryptable by said ones of the other user terminals having said attribute secret keys corresponding to given attributes by means of said public keys, said content being only accessible by using said group key.

Claims 22-25 (cancelled)